

Министерство науки и высшего образования РФ
Правительство города Севастополя
Федеральное государственное бюджетное учреждение науки
Федеральный исследовательский центр
«Институт биологии южных морей имени А. О. Ковалевского РАН»
Всероссийское гидробиологическое общество при Российской академии наук
Русское географическое общество
Паразитологическое общество при Российской академии наук

Изучение водных и наземных экосистем: история и современность

Международная научная конференция, посвящённая 150-летию
Севастопольской биологической станции —
Института биологии южных морей имени А. О. Ковалевского
и 45-летию НИС «Профессор Водяницкий»

Тезисы докладов

13–18 сентября 2021 г.
Севастополь, Российская Федерация

Севастополь
ФИЦ ИНБЮМ
2021

Do Epibiotic Suctorians Choose Attachment Sites of Copepod Body?

Endo Y.^{1,2}, Sato Y.^{1,3}, Yamaguchi A.⁴, and Dovgal I.⁵

¹Laboratory of Biological Oceanography, Graduate School of Agricultural Science,
Tohoku University, Sendai, Japan

²The Open University of Japan, Sendai, Miyagi, Japan

³Kaneryo Sea Vegetable Corp., Japan

⁴Marine Biology Laboratory, Graduate School of Fisheries Sciences, Hokkaido University, Japan

⁵A. O. Kovalevsky Institute of Biology of the Southern Seas of RAS, Sevastopol, Russia

yoshinari.endo.d2@tohoku.ac.jp

Epibiotic relations between copepods and suctorian ciliates have long been known. However, the attachment sites of suctorians on copepod bodies have not been investigated intensively, although this information may be important to understand the life history of these suctorians and the benefits and harmful effects of epibiosis. We investigated epibiosis between calanoid copepods and suctorian ciliates collected widely from the northern North Pacific Ocean. Almost all copepods were adult females of mid- and deep-water species, probably because they are larger and live longer than surface water species and males. Any suctorian species that infested *Metridia pacifica* and *M. similis* attached almost exclusively to their urosome. Suctorians might avoid or could not stay attached to anterior parts of fast-swimming copepods. Movement of suctorians from one copepod individual to another would take place when swarmers are formed and individuals of copepods take close contact, e. g. during copulation. Swarmers would move to another copepod individual and settle at these contact position. The attachment site of two suctorians, *Actinocyathula pleuromammae* and *Paracineta gaetani*, extended to the anterior part of the copepod body as the number of attached suctorians increased, suggesting they are obliged to attach to suboptimal parts exposed to faster water current.

The work of I. Dovgal was conducted within the framework of the state assignment of the A. O. Kovalevsky Institute of Biology of the Southern Seas of RAS № 121040500247-0.